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THE IMPACT OF SEXUAL HEALTH CURRICULA ON COLLEGE STUDENTS'

ATTITUDES TOWARDS TRANSGENDER PEOPLE

BY

CRASSANDRA MANDOJANA-DUCOT

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

IN

PSYCHOLOGY

UNIVERSITY OF RHODE ISLAND

2019

MASTER OF ARTS THESIS
OF
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UNIVERSITY OF RHODE ISLAND
2019

Abstract

The purpose of this study was to explore first year college student's attitudes and beliefs towards transgender people and whether high school sexual health curricula are related to the development of these beliefs. This study examined attitudes that current first year college students hold towards transgender people. The students were probed to recall whether they were exposed to comprehensive sexual health curricula versus abstinence-only curricula. A second purpose was to examine if their participation in their high school Gay-Straight-Alliances (GSA) predicted their attitudes towards transgender people as measured on the three scales of the Transgender Attitude and Belief Scale (TABS): Interpersonal Comfort, Sex/Gender Beliefs, and Human Value. Results indicated that attitudes of students who participated in a comprehensive sexual health curriculum was significantly related to participants' positive ratings of Human Value. After controlling for potential confounding variables, such as the participants' sexual orientation, results indicated that student attitudes towards transgender people's Human Value were significantly impacted by the exposure to comprehensive sexual health curriculum. After controlling for potential confounds, there was no significant interaction between the presence of a GSA, or participation in a GSA, and attitudes towards transgender people. Study limitations and future directions for research are explored.

ACKNOWLEDGEMENTS

Thank you to my major professor, Dr. Margaret Rogers, for all your support and effort in motivating me to accomplish this project! I'd like to give a special thanks to my committee members, Dr. Andrea Paiva and Dr. Annemarie Vaccaro, for their feedback, support, and thoughtful contributions to my project. Thank you all for supporting my research in a topic that is so important to me.

Finally, thank you to my partner, Evan. You have been a constant foundation of warm support and my best friend. You have supported me on this journey and for that *gracias, te amo mi amor*.

Table of Contents

ABSTRACT.....	ii
ACKNOWLEDGEMENTS.....	iii
TABLE OF CONTENTS.....	iv
LIST OF TABLES.....	vi
CHAPTER 1.....	1
INTRODUCTION.....	1
The School Environment for Transgender Students.....	1
Comprehensive Sexual Health Curriculum.....	4
Abstinence Only Sexual Health Curriculum.....	6
Sexual Health Curricula and LGBTQ Persons.....	7
Social Environment for Transgender Students.....	8
Attitudes Towards LGBTQ Persons.....	10
Purpose of Present Study.....	12
CHAPTER 2.....	13
METHODS.....	13
Participants.....	13
Measures.....	16
Procedure.....	19
CHAPTER 3.....	21
RESULTS.....	21
Preliminary Analyses.....	21

Research Questions.....	21
CHAPTER 4.....	30
DISCUSSION.....	30
Limitations.....	33
Future Directions.....	35
APPENDIX A - Statement on Diversity	36
APPENDIX B – Demographic and Personal Background Questionnaire.....	37
APPENDIX C – Sexual Health Curriculum/GSA Questionnaire	40
APPENDIX D – Transgender Attitudes and Beliefs Scale.....	42
APPENDIX E – Cognitive Interview Questions.....	45
APPENDIX F – Recruitment Letter	49
APPENDIX G – Consent Form for Research	50
BIBLIOGRAPHY.....	52

List of Tables

TABLE	PAGE
Table 1. Participant Characteristics.....	13
Table 2. Tests of Between Subjects Effects for Sexual Health Curricula Variable	21
Table 3. Sexual Health Content Overall.....	24
Table 4. Sexual Health Content by Curricula.....	25
Table 5. Table of Means.....	26
Table 6. Tests of Between Subjects Effects for GSA Variables.....	28
Table 7. Tests of Between Subjects Effects for GSA Participation.....	29

Chapter 1

Introduction

Visibility of transgender persons' civil rights issues have risen over the past several years. The term transgender here is used as an umbrella term that encompasses many varied gender identities, such as agender, genderfluid, male-to-female transgender/transsexual, or female-to-male transgender/transsexual. In this paper, transgender will be used to refer to any person who does not identify with their assigned sex at-birth. Recent research suggests that schools have far to go in creating safe and inclusive environments for Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) students (Peter, Taylor, & Campbell, 2016). Often, research on transgender students are grouped under the larger acronym 'LGBTQ.' Although sexual orientation and gender identity are different facets of identity, someone's sexuality usually depends on their gender. For example, if someone identifies as gay or lesbian, they are romantically or otherwise interested in someone of their same gender identity. Much of the existing research focuses on LGBTQ students as a whole, with few studies looking exclusively at the experiences of transgender students.

The School Environment of Transgender Students

Students who identify as transgender face several challenges within their schools that affect their psychological well-being. Transgender students are at an increased risk for experiencing social rejection from their fellow peers as well as depression and suicide ideation (Cohen-Kettenis, Owen, Kaijser, Bradley, & Zucker, 2013; Di Ceglie, Freedman, McPherson, & Richardson, 2002; Meyers, 2003). According to Silberg et al. (2016), bullying significantly increases the likelihood of

an adolescent developing psychiatric disorders and endorsing suicide ideation. The current state of bullying, harassment, and discrimination towards students who identify as LGBTQ was reported in the Gay Lesbian and Straight Education Network (GLSEN) National School Climate survey. This survey indicated that the majority of LGBTQ students face significant negative attitudes within their schools. Indeed, Kosciw, Greytak, Giga, Villenas, and Danischewski (2016) found that over half of LGBTQ students felt unsafe in their schools.

Students who identify as LGBTQ face safety concerns and discrimination within their schools. Most (85.2%) LGBTQ students reported being verbally harassed at school. Over half of LGBTQ students surveyed (54.5%) were verbally harassed based on their gender expression (Kosciw et al., 2016). The majority (85.7%) reported hearing negative slurs about transgender persons at school (Kosciw et al., 2016). Fewer (27%) LGBTQ students reported that they have been physically harassed at school due to sexual orientation and 20.3% due to their gender expression, with 13% assaulted at school due to identifying as LGBTQ (Kosciw et al., 2016). Of particular importance for discrimination towards transgender students, half of those sampled report being denied the use of their preferred pronoun to match their gender identity. The majority of transgender students were also forced to use the bathroom of their assigned sex, not their gender identity (Kosciw et al., 2016).

LGBTQ students express their safety concerns in a variety of ways, such as by avoiding school. According to Kosciw et al. (2016), many LGBTQ students avoided school or school functions due to fear; 31.8% missed school at least once, 10% missed four or more days, 39.9% avoided public bathrooms at school, 37.9% avoided

locker rooms, and 71.5% avoided school functions. This avoidance has the potential to dramatically interfere with these children's future as over 30% indicated the desire to drop out of school (Kosciw et al., 2016).

These data suggest that the current school experience of LGBTQ students is largely negative and characterized by fear and isolation. Fortunately, some schools have considered ways to improve the school experience for transgender students by addressing social and policy elements that impact the school's psychological and emotional environment. Studies have shown that psychological resilience for transgender adolescents is mediated by perceived social support (Grossman, D'Augelli, & Frank, 2011). This means that transgender adolescents that have an accepting social support system have a greater likelihood of not experiencing isolation, fear, or psychiatric problems. Grossman et al. (2001) asserts the importance of providing an accepting environment for transgender adolescents in order to promote well being. Kosciw et al. (2016) found that LGBTQ students who faced lower levels of bullying or discrimination had three times fewer absences on average compared to those students who reported high rates of harassment (20.1% vs. 62.2%).

One way that schools have attempted to intervene for safety concerns is by establishing Gay Straight Alliances (GSA) or similar groups dedicated to raising awareness and acceptance for LGBTQ students. Similarly, Kosciw et al. (2016), students who attended a school with a GSA heard homophobic and transphobic remarks less frequently than those in schools without a GSA. Ioverno, Belser, Baiocco, Grossman, and Russell (2016) found that students reported higher levels of perceived safety within their schools and reduced homophobic bullying in their

sample of schools that included GSAs. In schools with GSAs, students also reported that their school administration more frequently intervened when bullying was reported (Kosciw et al., 2016). Further, the students reported that school staff were more open and accepting of sexual orientation and gender diversity when GSAs were present. In addition, LGBTQ students in schools with GSAs felt more connected to their school when compared to those in schools who did not have a GSA (Kosciw et al., 2016). However, 14% of LGBTQ students report being prevented to form or promote such groups within their schools (Kosciw et al, 2016).

Comprehensive Sexual Health Curriculum

Inclusive curriculum also impact LGBTQ students' sense of connectedness to their schools. An inclusive curriculum refers to representation of LGBTQ people in history or current events within the school's curriculum and access to information (such as library books or internet sources) on LGBTQ issues. Education that incorporates an inclusive curriculum in sexual health courses for LGBTQ students reduces bullying for students and results in reduced health disparities for LGBTQ populations (Future of Sex Education [FoSE], 2012). The inclusion of LGBTQ issues within the curriculum significantly impacted the rate that students' heard homophobic and transphobic comments (Kosciw et al., 2016). Students also felt safer within their schools, were more likely to attend school, and less likely to consider dropping out of school when an inclusive curricula was employed (Kosciw et al., 2016). The classes that incorporate an inclusive curriculum for LGBTQ students most often are English, History, and Health classes (Kosciw et al., 2016).

Inclusive health curriculum follows *comprehensive sexual health education* guidelines. Comprehensive sexual health education is defined by the FoSE (2012) as “a planned, sequential K-12 curriculum that is part of a comprehensive school health education approach which addresses age-appropriate physical, mental, emotional and social dimensions of human sexuality.” This definition is also supported by the Center for Disease Control and Prevention’s (CDC) recommendations and guidelines for comprehensive sexual health education. The CDC also endorses the World Health Organization’s description of sexual health:

The World Health Organization defines sexual health as a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence (CDC, 2016).

The CDC’s Division of Adolescent and School Health compiled the Health Education Curriculum Analysis Tool (HECAT) to help schools implement evidence-based aspects of sexual health education to guide the development of health education courses. HECAT recommends standards to be addressed in comprehensive sexual health education, with the caveat that this curriculum be amended to match local or state laws. The first standard is that students will comprehend concepts related to health promotion and disease prevention. Second, students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors. Third, students will demonstrate the ability to access valid information, products, and

services to enhance health. The fourth standard is that students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks. The fifth standard states that students will demonstrate the ability to use decision-making and goal-setting skills to enhance health. The sixth standard is that students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks. Lastly, students will demonstrate the ability to advocate for personal, family, and community health. (HECAT, 2012).

Abstinence-Only Curriculum

According to the CDC's Division of Adolescent and School Health (DASH) (2014), less than half of high schools in the U.S. teach medically accurate and developmentally appropriate material in sexual health courses. Another type of sexual health education that often gains attention is *abstinence-only*. Abstinence-only education can be funded through section 510(b) Title V of the Social Security Act, P.L. 104-193. Outlined in this law, abstinence-only education refers to education that has as its exclusive purpose teaching the social, psychological, and health gains to be realized by abstaining from sexual activity. Abstinence-only curriculum teaches that abstinence from sexual activity outside marriage is the expected standard for all school-age children and is the only certain way to avoid out-of-wedlock pregnancy, sexually transmitted diseases, and other associated health problems. This program asserts that a mutually faithful monogamous relationship in the context of marriage is the expected standard of sexual activity and that sexual activity outside of the context of marriage is likely to have harmful psychological and physical effects. Further, bearing children out-of-wedlock is likely to have harmful consequences for children,

parents, and society. This curriculum also teaches students how to reject sexual advances, how alcohol and drug use increase vulnerability to sexual advances, and the importance of attaining self-sufficiency before engaging in sexual activity (ASPE, 2016).

Sexual Health Curricula and LGBTQ Persons

Research has explored the effectiveness of including LGBTQ topics in sexual health education as a method to reduce lesbian, gay, and bisexual persons health disparities ([FoSE], 2012). Comprehensive sexual health classes have been shown to reduce health disparities in sexual minority youth (FoSE, 2012). Health disparities refer to issues of access or availability to appropriate health services. Health disparities negatively influence the pathways to academic achievement (Basch, 2010). Sexual and gender minority youth have high levels of health disparities that comprehensive sexual health education can address. However, more research needs to focus on how school sexual health courses may play a role in influencing attitudes and beliefs towards transgender persons.

Sexual health education in U.S. public schools is a contested and controversial topic. Research concerning sexual health and other health classes dates back to the early 1900s. Sexual health education is packaged in a variety of ways; the two most prominent approaches are comprehensive sexual health education and abstinence-only education. Comprehensive sexual health education is meant to follow the CDC's guidelines and be integrated throughout schooling and be developmentally appropriate. Abstinence-only education is designed to advocate that abstinence is the

only method to prevent STIs or pregnancy and stresses that the expected behavior of people is to remain sexually abstinent until marriage.

Abstinence-only perspectives leave out the diversity of sexual activities, sexual orientations, and the diversity of gender identity. For example, abstinence-only curricula only focuses on intercourse between a biological male and biological female within the context of a monogamous marriage. The abstinence-only-until-marriage program has neglected the experiences of many same sex couples who were not legally allowed to marry in every state until 2015. It continues to further disregard the experiences of transgender and intersex persons. Comprehensive sexual health education taught appropriately and with fidelity to CDC recommendations can validate identity exploration for all students while being inclusive to those who are gender diverse.

High school students' participation in comprehensive sexual health education courses is associated with health and social-emotional benefits (FoSE, 2012). States in the U.S. that mandate medically accurate comprehensive sexual health classes for students have a lower rate of teenage pregnancies, dating violence, bullying, and reduced incidence of STIs (FoSE, 2012). In contrast, schools that have abstinence-only education programs are more likely to have higher rates of teenage pregnancies (Kohler, Manhart, & Lafferty, 2008). These data dispel the myth that teaching adolescents about intercourse and sexuality encourages teenagers to have sex. Further, comprehensive sexual health education does not increase the risk of youth contracting an STI (Kohler et al., 2008).

Social Environment for Transgender People

Transgender adolescents' experiences are influenced by their families and peer groups. According to Moody, Fuks, Peláez, and Smith (2015), perceived social support and a sense of social belonging is a major protective factor for transgender adolescents. A way schools can enhance social belonging for transgender adolescents is to establish groups such as GSAs (Marx & Kettey, 2016). According to Lapointe (2014), GSAs in high schools help heterosexual students find ways to use their own privileges to address LGBT students' needs. Heterosexual students also learn to combat stereotypes about LGBT persons and address HIV-related myths. Similar groups on college campuses also help to provide an inclusive environment for LGBTQ students (Marine & Nicolazzo, 2014). McCormick, Schmidt, and Clifton (2015) suggest that GSAs are related to increased perceptions of safety and positive identity development because they help normalize sexual diversity in schools. This normalization leads to positive outcomes in social and academic functioning for LGBTQ students (McCormick, Schmidt, & Clifton, 2015). Additional research suggests that even modest efforts to be inclusive to LGBTQ students, such as promoting GSAs, impacts the experiences and perceptions of sexual minority youth in schools (Peter, Taylor, & Campbell, 2016). These efforts can dramatically reduce incidents of suicidality for LGBTQ teens (Peter, Taylor, & Campbell, 2016). However, Marine and Nicolazzo (2014) suggest that these groups have far to go in terms of including transgender students specifically in these spaces.

In conclusion, there is a need to identify social protective factors for transgender persons in the U.S.'s public schools. LGBTQ students face disproportionate rates of depression and bullying compared to heterosexual or

cisgender students. A protective factor for transgender people is social support (Moody et al., 2015). Comprehensive sexual health classes have been shown to increase the visibility, acceptance, and health of sexual minority students and prevent a host of other health risks. A major purpose of this study is to examine whether sexual health education and GSAs can influence attitudes towards transgender people by creating a sense of understanding about sexuality and gender.

Attitudes Towards LGBTQ Persons

Attitudes that heterosexual and cisgender people hold towards members of the LGBTQ significantly impact the sense of well-being for this population. The Cooperative Institutional Research Program (CIRP) survey tracks demographics, high school experiences, attitudes, behaviors, and expectations for college students within participating universities in the U.S. (Eagan et al., 2016). These data examine incoming college students' demographic data, political identity, socializing behaviors, and other constructs related to academic or occupational goals and behaviors (Eagan et al., 2016). According to Eagan et al. (2010), 76.5% of the incoming freshman for the year 2010 agreed that gay and lesbian people should be able to adopt children. More female first year respondents (82.1%) agreed that LGB people should be able to adopt children than male respondents (68.8%) (Eagan et al., 2010). These data stand in contrast to previous generations of youth and young adults evaluated by the CIRP study, indicating a positive shift in view towards LGB people's rights. This is particularly important because prior research has demonstrated that social and peer acceptance for LGBTQ persons is critical in positive mental health (Cohen-Kettenis et al., 2003; Gower et al., 2017; Kosciw et al., 2016; Peter et al., 2016).

The most recent CIRP study highlighted transgender students' pre-college experiences, demographics, and goals. For the first time in 50 editions of this survey, CIRP included the option for participants to identify their gender identity instead of their sex (Eagan et al., 2016). Transgender students rated themselves lower than cisgender students in the areas of self-confidence, academic self-concept, leadership ability, and physical health, with the largest gap within physical health (i.e., somatic symptoms) (Eagan et al., 2016). Additionally on a positive note, transgender students, compared to their cisgender peers, reported higher levels of civic engagement and being more knowledgeable about social justice issues.

A recent study sponsored by Gay and Lesbian Alliance Against Defamation (GLAAD) found in their 2017 Harris Poll that, for the first time since the survey's conception, there was a 4% decline in acceptance towards LGBTQ people (Ellis, 2018). Previous edition of the survey reported that 53% of participants reported being comfortable with LGBTQ people across a variety of settings, whereas this decreased to 49% in 2017 (Ellis, 2018). The Harris Poll found that there was a meaningful shift from heterosexual and cisgender people identifying as "Allies" to "Detached Supporters" (Ellis, 2018). Ellis (2018) defined Allies as non-LGBTQ people who were responded that they were "very" or somewhat" comfortable in several social situations with LGBTQ people, whereas Detached Supporters' responses varied across the situations. The Harris Poll also found that more people reported that they were uncomfortable with LGBTQ people than in previous years (Ellis, 2018). Little is known about the reasons behind this shift. These data show the importance of

examining current young adults attitudes towards the LGBTQ community, especially transgender people.

Purpose of Present Study

This study had three aims. The first purpose was to explore college students' attitudes and beliefs towards people who are transgender. The Transgender Attitudes and Beliefs Scale (TABS) by Kanamori, Pegors, Hulgus, and Cornelius-White (2017) was used to measure college students' attitudes and beliefs based on the three subscales that comprise the TABS: Interpersonal Comfort (towards those who identify as transgender), Sex and Gender Beliefs, and Human Value (of people who are transgender).

A second purpose of this study was to examine how types of sexual health education impacts college students' attitudes and beliefs towards people who identify as transgender. The independent variable for this question was type of sexual health education (abstinence-only or comprehensive or unsure), and the dependent variables were the three subscales from TABS: Interpersonal Comfort, Sex and Gender Beliefs, and Human Value.

A third purpose of the study was to examine how participation in and availability of gay-straight alliances (GSA) in high school impacts college students' attitudes and beliefs towards people who are transgender. The independent variables were if a GSA was present in the participant's high school, if the student participated in the GSA, or if there was no GSA present. The dependent variables were the TABS Interpersonal Comfort, Sex and Gender Beliefs, and Human Value subscales.

Research Questions

The study addressed the following questions:

- 1) What are college students' attitudes and beliefs towards people who identify as transgender?
- 2) Do college students' attitudes towards people who are transgender vary as a function of previous sexual health courses?
- 3) Do students' attitudes towards people who are transgender vary based on their exposure to a GSA? Further, does participation in a GSA affect cisgender students' attitudes and beliefs towards people are transgender?

Chapter 2

Methods

Participants

The present study involved 256 first year University of Rhode Island students who participated (including men = 88 (34.37%), women = 166 (64.84%), transgender/non-binary = 2 (.78%)) aged 18 to 26 years old. The students were enrolled in general education courses such as General Psychology, Communications Foundation, and General Sociology. Table 1 provides demographic and personal background information of the 256 participants.

Table 1

Participant Characteristics

Variables	N	%
Gender		
Women	166	64.8
Men	88	34.4

Transgender/non-binary	2	.8
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Race/Ethnicity

White/Caucasian	180	70.3
Black/African American	37	14.5
Hispanic/Latinx	24	9.4
American Indian/Native	7	2.7
American Asian/Pacific Islander	5	2
Multi-racial	5	1.2

Sexual Orientation

Straight/Heterosexual	227	88.7
Bisexual/Pansexual	26	10.2
Lesbian	1	.4
Gay	1	.4
Queer	1	.4

State of High School Graduation

Rhode Island	127	49.6
Massachusetts	36	14.06

Connecticut	28	10.93
New York	26	10.15
New Jersey	14	5.46
New Hampshire	6	2.34
Florida	2	.8
Oklahoma	2	.8
Texas	2	.8
Virginia	2	.8
California	1	.4
Colorado	1	.4
Hawaii	1	.4
Kentucky	1	.4
Maine	1	.4
Maryland	1	.4
North Carolina	1	.4
Oregon	1	.4
Pennsylvania	1	.4
Outside of U.S. (Nigeria)	1	.4

Age (in years)		
18	126	49.2
19	82	32
20	32	12.5
21	9	3.5
26	2	.8
27	1	.4
Missing Data	4	1.56

Measures

Demographic and personal background information was collected from the participants. These questions included age, gender identity, race/ethnicity, sexual orientation, and state in which they graduated high school (see Appendix B). In addition, the participants responded to the following three measures.

Transgender Attitudes and Beliefs Scale. The Transgender Attitudes and Beliefs (TABS) scale (Kanamori et al., 2017) was used (with permission) to assess three attitudes participants have towards people who are transgender (see Appendix D). The TABS instrument was developed to study religiosity and attitudes towards transgender persons, specifically evangelical Christians' attitudes (Kanamori et al., 2017). The TABS has three subscales. The first variable is Interpersonal Comfort (14 items); this relates to how comfortable socially a participant indicates they are being around someone who is transgender. Higher scores on this subscale indicate greater

comfort with transgender people. The second subscale is Sex and Gender Beliefs (10 items). In this subscale, participants are asked to endorse the level of agreement with conservative or liberal views of sex and gender. For example, participants are asked to rate their agreement with statements such as: “A person who is unsure of their gender is mentally ill” (Kanamori et al., 2017). Higher scores on this subscale may indicate that the participant has liberal or progressive views of sex and gender. The third subscale is the Human Value subscale (5 items). For Human Value, this subscale assesses the value participants have for people who are transgender, regardless of their own opinions of transgender topics or sex and gender. A high score in this subscale indicates that the participant values someone who is transgender regardless of their views on transgender issues or rights.

For the present study, the range and mean of scores for each subscale was calculated and follows: Interpersonal Comfort subscale scores range from 14 to 98 ($M = 73.94$, $SD = 14.16$); Sex and Gender Belief subscale scores range from 10 to 70 ($M = 43.27$, $SD = 11.61$); and Human Value subscale scores range from 5 to 30 ($M = 31.49$, $SD = 5.26$).

In the development and validation of the TABS, Kanamori et al. (2017) reported high reliability estimates for each subscale as measured by Cronbach’s alpha (Interpersonal Comfort $\alpha = .98$, Sex and Gender Beliefs $\alpha = .97$, Human Value $\alpha = .96$). In the present study, reliability estimates for each scale were calculated using Cronbach’s alpha (Interpersonal Comfort $\alpha = .88$, Sex and Gender Beliefs $\alpha = .89$, and Human Value $\alpha = .94$). These three subscales served as the study dependent variables.

Of note, in the present study the definition of a transgender person on the TABS was changed to be more inclusive of trans* identities. The definition was altered from “For this questionnaire, a transgender person is defined as a person whose biological sex at birth does not match their felt sense of self as male or female” (Kanamori et al., 2016) to “For this questionnaire, a transgender person is defined as a person whose assigned sex at birth does not match their gender identity.”

Sexual Health Curricula. Participants were asked two questions pertaining to sexual health curricula (see Appendix C). Participants were asked to endorse which approach, abstinence-only or comprehensive, was more similar to the content they were exposed to in their high school. A brief definition was created for each curricula as well as a third option for participants to select if they could not recall. The second question asked for participants to endorse various elements or topics that were present in their sexual health course(s). These questions required participants to indicate which of the following topics were represented in their high school curricula: condoms/birth control, STIs, healthy relationships, dating violence, sexual violence, consent, sexuality, gender identity, and same sex relationships. For the present study, the type of sexual health curricula the students were exposed to served as an independent variable.

Gay-Straight Alliances. Five questions were asked about Gay-Straight Alliances (GSA) (see Appendix C). Participants responded to questions about whether a GSA, or similar group, was present within their high school, if they were a member of their school’s GSA or similar group, and their level of involvement with their high schools’ GSA, or similar group. Participants were also queried about their

participation in a community-based LGBTQ group and finally if they were ever involved with the University of Rhode Island's GSA. The presence of a GSA was an independent variable for the third research question.

Procedure

Prior to the study implementation, University of Rhode Island's Institutional Review Board approved two phases of this study.

Formative measurement work. The first phase of the study included a cognitive interview process. In this process, 12 participants were recruited from a general education course, General Psychology and invited to a one-on-one 15-20 minute interview with the researcher in which they responded to the study survey questions and protocol. Based on their feedback, modifications were made to the survey instruments (including directions and questions). During the interview, participants were asked to read each item to themselves and consider their response (see Appendix E). Then, the researcher checked for understanding and clarity of the items using follow up probes (see Appendix E). The first items concerned the two definitions of sexual health curricula: abstinence-only versus and comprehensive sexual health education curricula. Most participants ($n = 8$) reported the definitions were easily understood as written and the majority ($n = 11$) rated the item as easy to answer. However, three participants suggested that the term "curriculum" could be potentially misunderstood: Indeed one participant needed the researcher to provide a definition of the terms "curriculum" and "abstinence." As a result of the feedback, the term "curriculum" was removed from the final survey's definitions of sexual health education and replaced with the term "content." In the final instrument, the word

“abstinence” was also defined (as not engaging in any sexual activity) as a result of the feedback. Next, participants were asked to endorse if topics from a list were present in their sexual health curriculum (see Appendix C). All participants endorsed that this question was worded clearly and the majority ($n = 11$) responded that the item was easy to answer. The next series of items that the interviewees responded to concerned GSAs within students’ high schools. Themes that emerged from participant responses concerned adding an additional qualifier for groups that may have not been called a GSA but are similar in their purpose to advocate for the rights of the LGBTQ community. As a result, the qualifier *GSA or similar group* was added to items concerning GSAs (see Appendix E).

Study recruitment and data collection. In the second phase of the study, participants were recruited from general education courses at the University of Rhode Island (e.g., General Psychology, General Sociology, Communications Foundations). Participants were provided with an anonymous online link by Qualtrics Survey Engine. Once they followed the link, they read an informed consent page including a description of the survey. They were asked to indicate whether they were at least 18 years old and if they agreed to participate in the study. If participants did not give their consent or were not at least 18 years old, the survey engine sent the participant to the end of the survey. If a participant indicated that they were in another year apart from their first, they were directed to the end of the survey as well. Upon meeting the eligibility criteria and agreeing to participate in the study, participants were directed to the demographic and personal background questions, sexual health curricula items, and GSA items. Following these items, participants were then directed to complete

the TABS. Students received course credit in return for their participation in the study.

Chapter 3

Results

Preliminary Analyses

Data were analyzed using IBM SPSS 25.0. Prior to conducting analyses to address the study inquiries, descriptive statistics were examined to determine if the data met the assumptions of normality, linearity, and homogeneity of variance. Preliminary analyses revealed that data did not meet the assumptions of normality, as the data was negatively skewed. Data were transformed using a log transformation in order to normalize the distribution. A correlation analysis revealed that a person's sexual orientation and knowing a person who is LGBT was related to the outcome variables (results from the TABS). This means that these variables are potential confounds, and therefore were analyzed as covariates in the Multivariate Analysis of Variance.

Main Findings

Research Question 1. Research question one investigated current first year college students' attitudes and beliefs towards people who are transgender. Again, for the present study, the range and mean of scores for each subscale was calculated and follows: Interpersonal Comfort subscale scores range from 14 to 98 ($M = 73.70$, $SD = 14.34$); Sex and Gender Belief subscale scores range from 10 to 70 ($M = 43.18$, $SD = 11.68$); and Human Value subscale scores range from 5 to 30 ($M =$

31.50, $SD = 5.25$). In the present study, students generally reported that they value transgender people's rights and humanity, they would be interpersonally comfortable with a transgender person, and they endorsed progressive ideas concerning sex and gender.

Research Question 2. Research question two examined if college students' who have been exposed to comprehensive sexual health content, rather than abstinence-only content, would foster more positive attitudes and beliefs towards people who are transgender. The students who were exposed to these two types of content were of unequal sizes; the majority of participants reported that they enrolled in a comprehensive sexual health course ($n = 182$; 71%); less enrolled in an abstinence-only sexual health course ($n = 47$; 18.4%), and some were unsure of which course they took ($n = 26$; 10.2%) (see Table 5). To assess the group differences between abstinence-only content and comprehensive sexual health content, a MANCOVA was conducted (see Table 2).

Results from the overall model revealed that a participant's Interpersonal Comfort with transgender people, Sex and Gender Beliefs, and Human Value of transgender people was significantly different based on the type of sexual health content they endorsed as being exposed to $F(6,472) = 6.72, p < .001$, with a small effect size calculated by Partial Eta Squared ($\eta^2 = .07$). The univariate effects of the three dependent variables were examined using follow-up ANCOVAs (see Table 2). Interpersonal Comfort ($F(2) = .890, p = .412$) and Sex and Gender Beliefs ($F(2) = 2.10, p = .124$) did not significantly differ based on the type of sexual health content endorsed. After controlling for the effects of covariates, univariate analyses indicated

that the Human Value subscale was significantly different based on to the type of sexual health content ($F(2) = 14.98, p < .001$), and obtained a medium effect sized calculated by Partial Eta Squared ($\eta^2 = .112$). This means that students who participated in a comprehensive sexual health course had significantly more positive attitudes towards transgender people's Human Value than did those who participated in abstinence-only courses. While this difference in means achieved statistical significance, the mean score of students who endorsed being exposed to the comprehensive sexual health content was only two points higher than the mean score of students within abstinence-only content group (see Table 5). There were no effects that could not be better explained by a participant's sexual orientation or proximity to a LGBT person for the variables Interpersonal Comfort and Sex and Gender Beliefs. This means that the type of sexual health course was only significant in relation to perceptions of Human Value for transgender persons.

Table 2

Tests of Between Subjects Effects for Sexual Health Content Variables

Source	Dependent Variable	Type III SS	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Interpersonal Comfort	.392 ^a	5	.078	10.689	.000	.183
	Human Value	.546 ^b	5	.109	11.116	.000	.189
	Sex/Gender Beliefs	.810 ^c	5	.162	10.936	.000	.187
Intercept	Interpersonal Comfort	18.700	1	18.700	2548.507	.000	.915
	Human Value	12.004	1	12.004	1221.194	.000	.837
	Sex/Gender Beliefs	14.399	1	14.399	971.606	.000	.803

Sex Education	Interpersonal	.013	2	.007	.890	.412	.007
	Comfort						
	Human Value	.294	2	.147	14.977	.000	.112
	Sex/Gender Beliefs	.062	2	.031	2.104	.124	.017

a. R Squared = .183 (Adjusted R Squared = .166)

b. R Squared = .189 (Adjusted R Squared = .172)

c. R Squared = .187 (Adjusted R Squared = .170)

Although not part of the main research questions, participants were asked to endorse which components were present in their sexual health course given a list of topics: condoms/birth control, STIs, healthy relationships, dating violence, consent, sexual violence, same sex relationships, gender identity, and sexuality (see Table 3). Most participants (about 88%) endorsed being exposed to topics about condom/birth control and STIs while far fewer indicated that gender identity ($n = 57$, 22.3%) and sexuality ($n = 93$, 36%) were discussed in their course (see Table 3).

There were also differences in endorsed content between the types of sexual health curricula a respondent participated in (refer to Table 4). In abstinence-only, healthy relationships ($n = 39$, 83%), STIs ($n = 34$, 72.3%), and dating violence ($n = 33$, 70.2%) were the most frequently endorsed content. In contrast, for those exposed to the comprehensive sexual health curricula, condoms/birth control ($n = 175$, 96.2%), STIs ($n = 175$, 96.2%), healthy relationships ($n = 166$, 91.2%) and dating violence ($n = 166$, 91.2%) were the most frequently endorsed as present in the course. Same sex relationships, sexuality, and gender identity were the least frequent topics reportedly included in both types of sexual health curriculum (Table 3). Also, a chi-square test of independence was conducted to assess the statistical association

between the two types of sexual health curricula and the topics endorsed. Results indicated that the topics same sex relationships ($X^2(1) = 9.55$, $p = .002$), condoms/birth control ($X^2(1) = 41.60$, $p < .001$), STI ($X^2(1) = 26.57$, $p < .001$), dating violence ($X^2(1) = 14.46$, $p < .001$), consent ($X^2(1) = 12.21$, $p < .001$), and sexual violence ($X^2(1) = 17.23$, $p < .001$) were significantly more likely to be endorsed as present in comprehensive sexual health curricula. There were no differences between the types of sexual health curriculum and the presence of the topics sexuality ($X^2(1) = 3.40$, $p = .065$), healthy relationships ($X^2(1) = 2.69$, $p = .101$), and gender identity ($X^2(1) = .53$, $p = .466$).

Table 3

Sexual Health Content Overall

Variables	Frequency	%
Condoms/Birth Control	226	88.3
STIs	225	87.9
Healthy Relationships	223	87.1
Dating Violence	212	82.8
Consent	199	77.7
Sexual Violence	181	70.7
Same Sex Relationships	105	41
Gender Identity	57	22.3
Sexuality	93	36.3

Table 4

Sexual Health Content by Curricula

Variables	Frequency	%
Abstinence-only Curriculum		
Healthy Relationships	39	83
STIs	34	72.3
Dating Violence	33	70.2
Condoms/Birth Control	30	63.8
Consent	29	61.7
Sexual Violence	23	48.9
Same Sex Relationships	10	21.3
Sexuality	12	25.5
Gender Identity	9	19.1
Comprehensive Curriculum		
Condoms/Birth Control	175	96.2
STIs	175	96.2
Healthy Relationships	166	91.2
Dating Violence	166	91.2
Consent	154	84.6
Sexual Violence	144	79.1
Same Sex Relationships	84	46.2
Sexuality	73	40.1

Gender Identity	44	24.2
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Table 5

Table of Means

Variables	Interpersonal Comfort Subscale	Sex and Gender Beliefs Subscale	Human Value Subscale
Abstinence-Only Curriculum			
N	45	45	45
Mean	72.44	44.84	30.16
Standard Deviation	14.33	11.03	4.02
Minimum - Maximum	39 - 92	20 - 63	20 - 35
Comprehensive Curriculum			
N	177	176	176
Mean	74.83	43.02	32.18
Standard Deviation	14.28	12	2.44
Minimum - Maximum	26 - 94	10 - 63	20 - 35
Overall			
N	256	256	256
Mean	73.94	43.27	31.49
Standard Deviation	14.16	11.61	5.26
Minimum - Maximum	26 - 94	10 - 63	20 - 35

Research Question 3. The third research question asked if college students' who participated in a GSA or had a GSA in their high school, or a similar group, would report more accepting attitudes toward people who are transgender. The majority of participants reported that a GSA, or similar group, was present in their high school ($n = 153$, 59.8%), less reported there was not a GSA present ($n = 74$, 28.9%), and some were unsure ($n = 29$, 11.3%). The majority of respondents reported that they did not participate in a GSA club or similar group ($n = 227$; 88.7%); while 18 (7%) students participated in GSA meetings. The latter group of students reported different levels of participation in their GSA; 12 (4.7%) attended less than two meetings, five (2%) attended some meetings, two (.8%) participants held leadership positions in their GSA, and one (.4%) attended the majority of meetings. Further, 20 (7.8%) participants were, or currently are, members of a community LGBT group, eight (3.1%) reported participating in GSA-sponsored events (i.e., The Day of Silence), and one (.4%) participant is a member of the University of Rhode Island's GSA.

To assess if there were group differences between attitudes towards transgender people based on the presence of a GSA in their high school, a MANCOVA was conducted. The overall model indicated statistical significance, however when covariates (knowing a person who is LGBT and respondent's sexual orientation) were accounted for there was no significant relationship between the presence of a GSA and Interpersonal Comfort ($F(2)=1.439$, $p = .239$), Sex and Gender Beliefs ($F(2)=1.593$, $p = .206$), or Human Value ($F(2)=1.403$, $p = .248$) (see Table 6). Although the sample size of those who participated in a GSA was small, results

indicated that participating in a GSA was also not related to Interpersonal Comfort ($F(3)=.617, p = .604$), Sex and Gender Beliefs ($F(3)=1.136, p = .335$), and Human Value ($F(3)=.285, p = .836$) (refer to Table 7). This means that the presence of a GSA in students' high school was not associated with their attitudes towards transgender people, and further that participating in a GSA also did not significantly impact attitudes towards transgender people.

Table 6

Tests of Between Subjects Effects for GSA Variables

Source	Dependent Variable	Type III SS	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Interpersonal Comfort	.411 ^a	5	.082	11.186	.000	.190
	Human Value	.280 ^b	5	.056	5.138	.000	.097
	Sex/Gender Beliefs	.825 ^c	5	.165	10.954	.000	.186
Intercept	Interpersonal Comfort	18.725	1	18.725	2548.336	.000	.914
	Human Value	12.515	1	12.515	1147.593	.000	.828
	Sex/Gender Beliefs	14.013	1	14.013	930.451	.000	.796
GSA	Interpersonal Comfort	.021	2	.011	1.439	.239	.012
	Human Value	.031	2	.15	1.403	.248	.012
	Sex/Gender Beliefs	.048	2	.24	1.593	.206	.013

a. R Squared = .190 (Adjusted R Squared = .173)

b. R Squared = .097 (Adjusted R Squared = .078)

c. R Squared = .186 (Adjusted R Squared = .169)

Table 7

Tests of Between Subjects Effects for GSA Participation

Source	Dependent Variable	Type III SS	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Interpersonal Comfort	.404 ^a	6	.067	9.077	.000	.186
	Sex/Gender Beliefs	.828 ^b	6	.138	9.138	.000	.187
	Human Value	.259 ^c	6	.043	3.910	.001	.090
Intercept	Interpersonal Comfort	14.050	1	14.050	1896.078	.000	.888
	Sex/Gender Beliefs	10.483	1	10.483	693.839	.000	.745
	Human Value	8.922	1	8.922	808.067	.000	.772
GSA Participation	Interpersonal Comfort	.014	3	.005	.617	.604	
	Sex/Gender Beliefs	.052	3	.017	1.136	.335	
	Human Value	.009	3	.003	.285	.836	

a. R Squared = .186 (Adjusted R Squared = .166)
b. R Squared = .187 (Adjusted R Squared = .167)
c. R Squared = .090 (Adjusted R Squared = .067)

Chapter 4**Discussion**

This study was designed to examine college students' attitudes towards people who are transgender. More specifically, the study investigated the influence of high school sexual health curricula on attitudes towards transgender people, and high school GSA presence and attitudes towards transgender people. Results indicated that

the type of sexual health curricula was significantly related to attitudes towards transgender people's "human value" as measured on the Human Value subscale of the TABS. Students who reported that they were enrolled in a comprehensive sexual health curriculum in high school also reported more positive attitudes concerning transgender individual's human value. This means that overall, students within this sample who had exposure to comprehensive sexual health were more likely to view transgender people as valuable human beings, deserving respect and dignity, and that they would not endorse maltreatment of transgender persons. This is a critically important finding as maltreatment, such as bullying, or complicity in bullying impacts transgender people's well-being (Gower et al., 2017; Kosciw et al., 2016; Mustanski et al., 2016) and fostering a positive and welcoming social environment is vital for transgender people's mental health (Kosciw et al., 2016; Mustanski et al., 2016). At the same time, it is important to note that the TABS scale includes a narrow and non-inclusive definition of people who identify as transgender and items within the scale are problematically worded. For example, within the Human Value subscale, items probe opinions about transgender people's humanity and ask a participant to agree if this group of people should have access to a basic human need: housing. The subscale as a whole could potentially be seen as offensive and dehumanizing to transgender or non-binary persons. Given this observation, better, more inclusive measures of attitudes towards transgender persons seems called for.

In terms of the study findings, although students who endorsed enrolling in a comprehensive sexual curriculum versus an abstinence-only health curriculum held more positive attitudes regarding transgender people's Human Value, there were no

significant effects found between curriculum exposure and attitudes towards Sex and Gender or Interpersonal Comfort with transgender people (as measured by the two relevant TABS subscales). When examining which specific topics were present in student's sexual health curriculum, relatively few participants reported that gender identity was discussed (23.4%) versus sexual orientation (43.3%). Therefore, comprehensive sexual health education may currently not consistently address the variation in human sex and gender (i.e., trans issues, intersex spectrum, etc.). In addition, it is possible that within the different curricula, there is variation in topics covered based on school district.

Findings from this sample indicated a non-significant influence for GSA presence on attitudes towards transgender people after controlling for participants' sexual orientation and relationships with LGBT people. Prior research has demonstrated that GSA presence in high school is associated with positive school climate and decreased bullying behavior towards to LGBT students (Steck & Perry, 2016; Swanson & Gettinger, 2016). The findings from the present study could be attributed to the small sample size, unequal groups, or the very small proportion of students indicating involvement with a GSA (3.21%). Indeed, the present study was made up mostly of students who identify as cisgender and heterosexual and may not have been inclined to participate in their high school's GSA.

The results of the present study add to our understanding of the influence of sexual health school curricula on attitudes towards transgender people. The present findings are based on a largely heterosexual, cisgender sample. Attitudes towards transgender people are understudied in the field. Virtually no research has explicitly

examined the influence of sexual health content on attitudes towards transgender people. The results of this study indicate that exposure to a comprehensive sexual health curriculum positively influences people valuing transgender people.

The covariates within the current study - knowing someone who is LGBT and the respondents' sexual orientation - were all significantly associated with measures of Interpersonal Comfort, Sex and Gender Beliefs, and Human Value towards transgender people. This finding is similar to previous research, in that knowing someone who is a member of the LGBT community (i.e. friends or family members who are LGBT) has been shown to foster more accepting attitudes towards the LGBT community (McCullough, Dispenza, Chang, & Zeligman, 2019; Woodford, Silverschanz, Swank, Scherrer, & Raiz, 2012). The present study expands on Woodford et al.'s (2012) findings by examining attitudes towards transgender persons.

Limitations

There are several limitations in this study. First, these data are retrospective. In the study, first year college students were asked to reflect back upon their high school experiences, which for some participants could have been a long period of time depending on when their sexual health curricula was taught. Second, data were not normally distributed, which is an assumption of a MANOVA analysis. Data were transformed to become a more normal distribution using a log transformation. Homogeneity of variance was also violated, indicating that the variance of the dependent variable was not equal across all groups. Further, the unequal group sizes and small sample size in several groups (i.e., GSA participation, abstinence-only

curricula) may also impact the generalizability and validity of the results. Third, the sexual health courses the participants took may have differed considerably from those defined in the present study. In the present case, the researcher examined two types of sexual health curricula: comprehensive and abstinence-only content. While there are institutions that publish evidence-based guidelines for sexual health curricula, such as the CDC (HECAT standards), state educational departments are largely autonomous in their decisions about what content to include in their schools' curricula. Further, private versus public schools are also held to different standards of what content can be delivered to students. In the present study, participants indicated their recollections of the various topics that were addressed in their sexual health course, however, there are varying ways and methods these topics may have been taught which could affect the impact these topics had on students.

Further, while this study examines two components of college students' high school experiences - sexual health courses and GSAs - there may be other factors within schools that affect attitude development towards transgender persons. For instance, the overall climate of their high school, media influences, parental attitudes, and political ideologies or religious leanings of their communities likely affect attitude development. These factors may have had an impact on participants' attitudes in the present study but were not measured nor assessed in any way.

Another limitation concerns the timing of data collection. Students were recruited as first year students once they had already been enrolled in college courses. Data collection took place in both first semester of the first year and second semester of their first year. It is likely that the university setting is a more diverse setting than

their high schools; therefore students could have been exposed to LGBTQ issues within their first year courses or in academic/social clubs. This could have affected attitude development towards transgender people outside the influence of high school curricula. This study did ask participants to endorse whether they were ever a member of URI's GSA or similar group as an effort to address this potential limitation. It was found that the majority of students did not participate in a community LGBT group ($n = 20, 7.81\%$) or URI's GSA ($n = 1, .4 \%$).

Future Research Directions

To overcome the limitations of the current study, future studies should not be retrospective, but instead employ high school students while they are enrolled in sexual health courses. Employing stronger methodological designs, such as pre-post measures or longitudinal data, to compare the effects of abstinence-only versus comprehensive sexual health education on attitude development is warranted. Further, more research is necessary to create inclusive and transgender-friendly attitude measures that evaluate the attitudes cisgender people hold towards this population. Research should also examine the different components of sexual health curricula, such as including gender identity and sexual orientation explicitly within the curricula, to investigate how knowledge of sexuality and gender identity may influence attitude development. It is critically important for the LGBT youth in U.S. schools have a positive environment that fosters acceptance for gender diverse and sexual minority students. Research suggests inclusive curricula, such as establishing GSAs or incorporating LGBT history and topics, helps to foster a positive school climate for LGBT students (Kosciw et al., 2016). The social environment is

particularly influential for LGBT people; as problems such as anxiety, depression, and suicide ideation are not a result of a gender or sexual minority identity but rather a function of the social environment. Investigating ways to foster positive school environment for LGBT people is of vital importance for our nation's youth.

Appendix A

Statement on Diversity

This study included participants of various ethnic, socioeconomic, and racial backgrounds within University of Rhode Island. While this study is aimed at cisgender participants (people who identify with their sex assigned at birth) this study contributes to our understanding of factors that influence climate for transgender and gender non-binary persons. The National Association of School Psychologists (NASP) published a Position Statement titled *Safe and Supportive Schools for LGBTQ+ Youth*, which details the ethical responsibilities of school psychologists to promote fairness and justice and to cultivate safe and welcoming school climates, and to work to reform system-level patterns of injustice (NASP, 2017). This study attempted to meet the goal detailed in this Position Statement in regard to gender diversity to promote positive social emotional and academic development for all youth (NASP, 2017)

Appendix B

DEMOGRAPHIC AND PERSONAL BACKGROUND QUESTIONS

1. Please indicate your gender identity (Select all that apply by checking the appropriate response(s)).

☐ Woman

☐ Man

☐ Cisgender woman

☐ Cisgender man

☐ Transgender

☐ Transwoman

☐ Transman

☐ Gender Nonbinary

☐ Genderqueer

☐ Genderfluid

☐ Agender/Neutrois

☐ Two spirit

☐ Prefer not to state

2. What is your race? (Check all that apply)

☐ African American/Black

☐ Caucasian/White

☐ Asian/Pacific Islander

☐ Native American/American Indian

☐ Latinx/Hispanic

☐ Other/Please specify: _____

3. Please indicate your sexual orientation. (Check all that apply)

☐ Straight/Heterosexual

☐ Gay

☐ Lesbian

☐ Bisexual

☐ Pansexual

☐ Asexual

☐ Aromantic

☐ Demisexual

☐ Queer

4. Do you know anyone who is Transgender? (Check one)

☐ Yes

☐ No

5. Do you know anyone who is Lesbian, Gay, or Bisexual? (Check one)

☐ Yes

☐ No

6. How long have you been attending University of Rhode Island? (Check one)

☐ 1 semester or less

☐ 1 year

☐ 2 years

☐ 3 years

___ 4 or more years

7. Which state did you attend for High School? Indicate the state you graduated from if you attended schools in multiple states.

APPENDIX C

SEXUAL HEALTH CURRICULA/GSA

1. Please indicate the type of sexual health content you were exposed to within your high school. If you cannot recall the curricula you were exposed to, select C.

☐ a. **Abstinence-only content:** Teaches that abstinence is the only way to protect against pregnancy, Sexually Transmitted Infections, and adverse health consequences resulting from sexual activity. The only relationship discussed was between a man and woman in the context of a monogamous marriage.

☐ b. **Comprehensive sexual health content:** Teaches that abstinence is the only sure way to prevent pregnancy and Sexually Transmitted Infections. However, preventative measures such as condoms and birth control are also discussed.

☐ c. Unsure/cannot recall

2. Please indicate which specific elements were present in your sexual health curriculum. (Select all that apply).

☐ Same sex marriage/relationships

☐ Condoms/birth control

☐ Sexually transmitted diseases

☐ Healthy relationships

☐ Dating violence

☐ Consent

☐ Sexual violence

☐ Gender identity

☐ Sexuality

3. Did your high school have a Gay-Straight-Alliance (GSA), or similar group devoted to promoting the safety and rights of LGBT persons? (Choose one)

☐ Yes

☐ No

☐ Unsure/Cannot recall

4. Were you a member of your high school's GSA, or similar group? (Choose one)

☐ Yes

☐ No

5. Please rate your level of involvement in your high schools' GSA, or similar group.

☐ Attended less than two meetings

☐ Attended some of the meetings

☐ Attended the majority of meetings

☐ Participated in GSA sponsored events (i.e., The Day of Silence)

☐ Held an officer or leadership position in a GSA

☐ I did not participate in the GSA/My school had no GSA or similar group

6. Have you been a member of a community LGBTQ group?

☐ Yes

☐ No

7. Have you been involved in URI's GSA?

☐ Yes

☐ No

APPENDIX D

TRANSGENDER ATTITUDE AND BELIEF SCALE

This questionnaire is designed to measure your beliefs and attitudes toward transgender persons. It is not a test, so there are no right or wrong answers. Please answer each question as carefully and honestly as you can, using the 7-point scale described below. For this questionnaire, a transgender person is defined as a person whose assigned sex at birth does not match their gender identity.

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Somewhat disagree
- 4 = Neither agree nor disagree
- 5 = Somewhat agree
- 6 = Agree
- 7 = Strongly agree

FACTOR 1 (Interpersonal Comfort)

Q1.1 I would feel comfortable having a transgender person into my home for a meal.

Q1.2 I would be comfortable being in a group of transgender individuals.

Q1.3 I would be uncomfortable if my boss was transgender.

Q1.4 I would feel uncomfortable working closely with a transgender person in my workplace.

Q1.5 If I knew someone was transgender, I would still be open to forming a friendship with that person.

Q1.6 I would feel comfortable if my next-door neighbor was transgender.

Q1.7 If my child brought home a transgender friend, I would be comfortable having that person into my home.

Q1.8 I would be upset if someone I'd known for a long time revealed that they used to be another gender.

Q1.9 If I knew someone was transgender, I would tend to avoid that person.

Q1.10 If a transgender person asked to be my housemate, I would want to decline.

Q1.11 I would feel uncomfortable finding out that I was alone with a transgender person.

Q1.12 I would be comfortable working for a company that welcomes transgender individuals.

Q1.13 If someone I knew revealed to me that they were transgender, I would probably no longer be as close to that person.

Q1.14 If I found out my doctor was transgender, I would want to seek another doctor.

FACTOR 2 (Sex/Gender Beliefs)

Q2.1 A person who is not sure about being male or female is mentally ill.

Q2.2 Whether a person is male or female depends upon whether they feel male or female.

Q2.3 If you are born male, nothing you do will change that.

Q2.4 Whether a person is male or female depends strictly on their external sex-parts.

Q2.5 Humanity is only male or female; there is nothing in between.

Q2.6 If a transgender person identifies as female, she should have the right to marry a man.

Q2.7 Although most of humanity is male or female, there are also identities in between.

Q2.8 All adults should identify as either male or female.

Q2.9 A child born with ambiguous sex-parts should be assigned to be either male or female.

Q2.10 A person does not have to be clearly male or female to be normal and healthy.

FACTOR 3 (Human Value)

Q3.1 Transgender individuals are valuable human beings regardless of how I feel about transgenderism.

Q3.2 Transgender individuals should be treated with the same respect and dignity as any other person.

Q3.3 I would find it highly objectionable to see a transgender person being teased or mistreated.

Q3.4 Transgender individuals are human beings with their own struggles, just like the rest of us.

Q3.5 Transgender individuals should have the same access to housing as any other person.

APPENDIX E

Cognitive Interview Questions

The present study used cognitive interviews with questions developed by the first author concerning Sexual Health Education (see Appendix C). According to Willis (1999), a cognitive interview can highlight structural and linguistic problems within survey question design. The cognitive interview questions used in the present study follow.

Question in its original form:

1. Which type of sexual health curricula were you exposed to within your high school? If you cannot recall the curricula you were exposed to, select C.

___ a. Abstinence-only curriculum: Teaches that abstinence is the only way to protect against pregnancy, Sexually Transmitted Infections, and adverse health consequences resulting from sexual activity. The only relationship discussed was between a man and woman in the context of a monogamous marriage.

___ b. Comprehensive sexual health curriculum: Teaches that abstinence is the sole sure way to prevent pregnancy and Sexually Transmitted Infections. However, preventative measures such as condoms and other birth control options are also discussed.

___ c. Unsure/cannot recall

Follow up probes:

1. Can you repeat question 1 in your own words?

2. What does an “abstinence-only sexual health curriculum” mean to you?
3. What does a “comprehensive sexual health curriculum” mean to you?
4. How could this question be reworded to make it clearer?
5. Was this question easy or difficult to answer?
6. Do you need any more information in order to answer this question?

Question in its original form:

2. Please indicate which specific elements were present in your sexual health curriculum.

Follow up probes:

1. Was this question easy or difficult to answer?
2. Is there another way to ask this question that would make it clearer?
3. How did you remember your answers?

Question in its original form:

3. Did your high school have a Gay-Straight-Alliance (GSA), or similar group devoted to promoting the safety and rights of LGBT persons?

Follow up probes:

1. Was this question easy or difficult to answer?
2. Is there another way to ask this question that would make it clearer?
3. How did you remember this?

Question in its original form:

4. Were you a member in your high school's GSA?

Follow up probes:

1. Was this question easy or difficult to answer?
2. Is there another way to ask this question that would make it clearer?
3. How did you remember this?

Question in its original form:

5. Please rate your level of involvement in your high schools' GSA.

Follow up probes:

1. Was this question easy or difficult to answer?
2. Is there another way to ask this question that would make it clearer?
3. Were the response choices clear?

Question in its original form:

6. Have you been a member of a community LGBTQ group?

Follow up probes:

1. What does a "community LGBTQ group" mean to you?
2. Is there another way to ask this question that would make it clearer?
3. Was this question easy or difficult to answer?

Question in its original form:

1. Have you been involved in URI's GSA?

Follow up probe:

1. Was this question easy or difficult to answer?

APPENDIX F

Recruitment Letter

The University of Rhode Island
Psychology Department
142 Flagg Rd
Kingston, RI 02881
Phone: (401) 874-2193
Fax: (401) 874-2157
Project Title: Sexual Health Courses and Attitudes Towards Transgender People

Dear _____,

I am a doctoral student in the School Psychology program at the University of Rhode Island. As a part of my thesis requirements, Principal Investigator Dr. Margaret Rogers and I are recruiting undergraduate students to participate in a study on **Sexual Health Courses and Attitudes Towards Transgender People**. I am writing to ask you to refer students for participation to the study. This research has been approved by the University of Rhode Island Institutional Review Board.

Students who participate will take part in an anonymous online survey inquiring about their high school experiences such as sexual health courses and gay-straight-alliances. Any information a participant offers will be kept strictly confidential and all information is de-identified. This survey will last about 20-25 minutes and be taken in online format.

Individuals that meet the following criteria are invited to participate:

- An undergraduate attending University of Rhode Island who is 18 years or older
- First semester first-year students

Please forward this announcement to students who might be interested in participating in this study. Please feel free to contact me with any questions about this study at (401)601-1417 or cmandojana@my.uri.edu.

Thank you for your time and consideration.

Sincerely,

Margaret Rogers, PhD
(401) 874-7999
Full Professor
School Psychology Program
University of Rhode Island

Crassandra Mandojana-Ducot, B.S.
(401) 601- 1417
Doctoral Student
School Psychology Program
University of Rhode Island

APPENDIX G

Consent Form for Research

THE
UNIVERSITY
OF RHODE ISLAND

COLLEGE OF
HEALTH SCIENCES



DEPARTMENT OF PSYCHOLOGY
Chafee Hall, 142 Flagg Road, Kingston, RI 02881 USA p: 401.874.2193 f: 401.874.2157 web.uri.edu/psychology

INFORMED CONSENT

The University of Rhode Island

Psychology Department

142 Flagg Rd

Kingston, RI 02881

Phone: (401) 874-2193

Fax: (401) 874-2157

Project Title: The impact of School Curricula on College Student's Attitudes Towards Transgender People

CONSENT FORM FOR RESEARCH

You have been invited to participate in the research projects detailed below. You are free to ask any questions you may have. If you have any concerns or questions please contact Principal Investigator, Margaret Rogers at (401) 874-7999, mrogers@uri.edu or Crassandra Mandojana-Ducot, at (401) 601-1417, cmandojana@my.uri.edu

Description of the project:

This thesis research study involves responding anonymously to the Transgender Attitudes and Belief Scale developed by Kanamori et al. (2016). Participants will also respond to questions about high school sexual health courses, high school gay-straight-alliances, and demographic/personal background information.

What will be done:

If you decide to participate in this study, you will anonymously answer questions from the Transgender Attitudes and Belief Scale, respond to demographic/personal background information, indicate which high school sexual health course you participated in, and indicate if you participated in a high school sponsored Gay-Straight-Alliance club, or similar group.

Risks or discomfort:

Brief discomfort may happen when answering sensitive questions about sexuality and gender identity.

Benefits of this study:

Benefits of participating in this study include expanding knowledge

IRB NUMBER:
HU1819-026
IRB APPROVAL
DATE: November 29,
2018
IRB EXPIRATION

on how high school experiences may influence attitudes towards people who are transgender. This will add to the literature about possible systems-level interventions to increase positive school climate for LGBTQ+ students.

Confidentiality:

Your participation in this study is strictly confidential. No names or identifying information will be collected. Demographic information is collected only for background purposes. All data will be de-identified and kept under password protection. You must be at least 18 years of age to participate in this study.

Decision to quit at any time:

If you decide to participate in this study, you can withdraw your participation at any time. There are no consequences for not participating in the study or electing to not respond to any questions.

Rights and Complaints:

If you have any questions, or if you are not happy about the way this study is conducted, you may contact Principal Investigator, Margaret Rogers at (401) 874-7999, mrogers@uri.edu or Crassandra Mandojana-Ducot at (401) 601-1417, cmandojana@my.uri.edu or. If you have any further questions about your rights as a research participant, you may contact the office of the Vice President for Research, 70 Lower College Rd, Suite 2, University of Rhode Island, Kingston, Rhode Island, telephone: (401) 874-4328.

By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Margaret Rogers, PhD
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Full Professor
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IRB APPROVAL DATE: November 29, 2018
IRB EXPIRATION DATE: October 19, 2019

Bibliography

- Alford, S. (2001). *Sex education programs: Advocates for youth*. Retrieved from:
<http://www.advocatesforyouth.org/publications/publications-a-z/655-sex-education-programs-definitions-and-point-by-point-comparison>
- Assistant Secretary for Planning and Evaluation. [ASPE] (2016). *The evaluation of abstinence education programs funded under title v section 510: Interim report. What Is the Title V Section 510 Abstinence Education Program?* Retrieved November 05, 2017, from <https://aspe.hhs.gov/report/evaluation-abstinence-education-programs-funded-under-title-v-section-510-interim-report/what-title-v-section-510-abstinence-education-program>
- Basch, C. E. (2011). Healthier students are better learners: A missing link in school reforms to close the achievement gap. *Journal of School Health*, 81(10), 593-598.
doi:10.1111/j.1746-1561.2011.00632.x.
- Bridges, E. & Hauser, D. (2014, May). Youth health and rights in sex education. Retrieved from: <http://www.futureofsexed.org/youthhealthrights.html>
- Center for Disease Control and Prevention. (2016, October). *Sexual health*. Retrieved September 12, 2017, from <https://www.cdc.gov/sexualhealth/Default.html>
- Center for Disease Control and Prevention. (2012). Health education curriculum analysis tool [HECAT] [PDF File]. Retrieved from:
<https://www.cdc.gov/healthyyouth/hecat/pdf/hecatoverview.pdf>
- Chin, H. B., Sipe, T. A., Elder, R., Mercer, S. L., Chattopadhyay, S. K., Jacob, V., ...& Santelli, J.; Community Preventive Services Task Force. (2012). The effectiveness of group-based comprehensive risk-reduction and abstinence education interventions to

- prevent or reduce the risk of adolescent pregnancy, human immunodeficiency virus, and sexually transmitted infections: Two systematic reviews for the Guide to Community Preventive Services. *American Journal of Preventative Medicine*, 42(3), 272-94. doi: 10.1016/j.amepre.2011.11.006.
- Cohen-Kettenis, P., Owen, A., Kaijser, V. G., Bradley, S. J., & Zucker, K. J. (2003). Demographic characteristics, social competence, and behavior problems in children with gender identity disorder: A cross-national, cross-clinic comparative analysis. *Journal of Abnormal Child Psychology*, 31(1), 41-53.
doi:<http://dx.doi.org.uri.idm.oclc.org/10.1023/A:1021769215342>
- Deschamps, D., & Singer, B. L. (2016). *LGBTQ stats: Lesbian, gay, bisexual, transgender, and queer people by the numbers*. New York: The New Press.
- Di Ceglie, D., Freedman, D., McPherson, S., & Richardson, P. (2002). Children and adolescents referred to a specialist gender identity development service: Clinical features and demographic characteristics. *International Journal of Transgenderism*, 6(1), No pagination specified. Retrieved from
<http://uri.idm.oclc.org/login?url=https://search-proquest-com.uri.idm.oclc.org/docview/619881259?accountid=28991>
- Dernissie, Z., Brener, N., McManus, T., Shanklin, S. L., Hawkins, J., & Kann, L. (2015). *School health profiles: Characteristics of health programs among secondary schools*. Retrieved September 12, 2017, from
https://www.cdc.gov/healthyyouth/data/profiles/pdf/2014/2014_profiles_report.pdf
- Dilley, J. (2009). *Research review: School-based health interventions and academic achievement*. Retrieved from: <http://.doh.wa.gov%2fmaterials%2fresearch-review->

school-based-health-interventions-and-academic

achievement%2f12_HealthAcademic_E09L.pdf&p=DevEx,5050.1

Durell, M., Chiong, C., & Battle, J. (2007). Race, gender expectations, and homophobia: A quantitative exploration. *Race, Gender & Class*, 14(1), 299-317. Retrieved from <http://www.jstor.org/stable/41675211>

Eagan, K., Stolzenberg, E. B., Zimmerman, H. B., Aragon, M. C., Sayson, H. W., & Rios-Aguilar, C. (2016). *The American freshman: National norms fall 2016*. Retrieved from: <https://www.heri.ucla.edu/monographs/TheAmericanFreshman2016.pdf>

Ellis, S. K. (2018). *Accelerating acceptance 2018: A survey of American acceptance and attitudes towards LGBTQ Americans*. Retrieved from: <https://www.glaad.org/files/aa/Accelerating%20Acceptance%202018.pdf>

Future of Sex Education Initiative [FoSE]. (2012). *National sexuality education standards: Core content and skills, K-12 [a special publication of the Journal of School Health]*. Retrieved from: <http://www.futureofsexeducation.org/documents/josh-fose-standards-web.pdf>

Gower, A. L., Forester, M., Gloppen, K., Johnson, A. Z., Eisenberg, M. E., Connett, J. E., & Borowsky, I. W. (2017). School practices to foster LGBT-supportive climate: Associations with adolescent bullying involvement. *Prevention Science*, No pagination. doi: <http://dx.doi.org.uri.idm.oclc.org/10.1007/s11121-017-0847-4>

Kanamori, Y., Pegors, T., Hulgus, J., & Cornelius-White, J. (2017). A comparison between self-identified Evangelical Christians' and nonreligious persons' attitudes towards transgender persons. *Psychology of Sexual Orientation and Gender Diversity*, 4(1), 75-86.

- Kohler, P. K., Manhart, L. E., & Lafferty, W. E. (2008). Abstinence-only and comprehensive sex education and the initiation of sexual activity and teen pregnancy. *Journal of Adolescent Health, 42*(4), 344-351. doi:10.1016/j.jadohealth.2007.08.026
- Kosciw, J. G., Greytak, E. A., Giga, N. M., Villenas, C. & Danischewski, D. J. (2016). *The 2015 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's schools*. New York: GLSEN.
- Lamb, S., Lustig, K., & Graling, K. (2013). The use and misuse of pleasure in sex education curricula. *Sex Education: Sexuality, Society and Learning, 13*(3), 305-318. doi:10.1080/14681811.2012.738604
- McCullough, R., Dispenza, F., Chang, C. Y., & Zeligman, M. R. (2019). Correlates and predictors of anti-transgender prejudice. *Psychology of Sexual Orientation and Gender Diversity*. Advance online publication. No pagination specified. <https://doi-org.uri.idm.oclc.org/10.1037/sgd0000334>
- Moody, C., Fuks, N., Peláez, S., & Smith, N. G. (2015). “Without this, I would for sure already be dead”: A qualitative inquiry regarding suicide protective factors among trans adults. *Psychology of Sexual Orientation and Gender Diversity, 2*(3), 266-280. doi:<http://dx.doi.org.uri.idm.oclc.org/10.1037/sgd0000130>
- Mustanski, B., Andrews, R., & Puckett, J. A. (2016). The effects of cumulative victimization on mental health among lesbian, gay, bisexual, and transgender adolescents and young adults. *American Journal of Public Health, 106*(3), 527-533. doi:<http://dx.doi.org.uri.idm.oclc.org/10.2105/AJPH.2015.302976>

- Peter, T., Taylor, C., & Campbell, C. (2016). The importance of school climate to suicidality among LGBTQ youth. *Journal of Gay and Lesbian Mental Health*, 20(3), 195-213. doi:<http://dx.doi.org/10.1080/19359705.2016.1171188>
- Silberg, J. L., Copeland, W., Linker, J., Moore, A. A., Roberson-Nay, R., & York, T. P. (2016). Psychiatric outcomes of bullying victimization: A study of discordant monozygotic twins. *Psychological Medicine*, 46(9), 1875-1883. doi: 10.1017/S0033291716000362.
- Steck, A. K., & Perry, D. R. (2016). Fostering safe and inclusive spaces for LGBTQ students: Phenomenographic exploration of high school administrators' perceptions about GSAs. *Journal of LGBT Youth*, 13(4), 351-377. doi: [10.1080/19361653.2016.1185759](http://dx.doi.org/10.1080/19361653.2016.1185759)
- Swanson, K., & Gettinger, M. (2016). Teacher's knowledge, attitudes, and supportive behavior toward LGBT students: Relationship to gay-straight alliances, antibullying policy, and teacher training. *Journal of LGBT Youth*, 13(4), 326-351. doi: 10.1080/19361653.2016.1185765
- Woodford, M. R., Silverschanz, P. S., Swank, E., Scherrer, K. S., & Raiz, L. (2012). Predictors of heterosexual college students' attitudes toward LGBT people. *Journal of LGBT Youth*, 9(4), 297-320. <https://doi-org.uri.idm.oclc.org/10.1080/19361653.2012.716697>